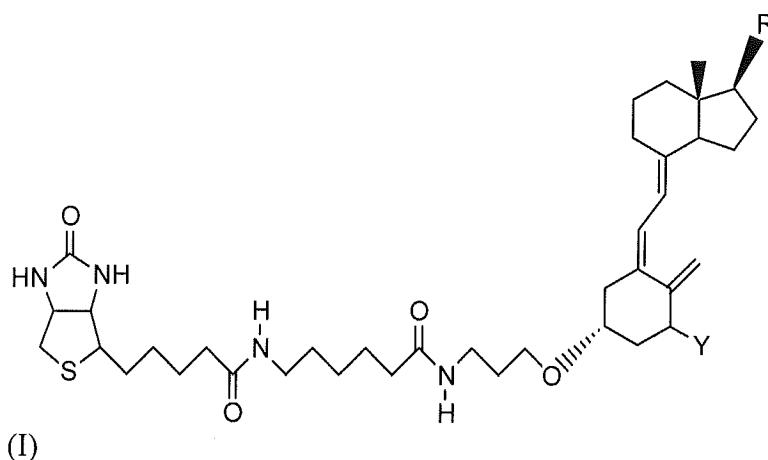


**AMENDMENTS TO THE CLAIMS**

1. **(Currently Amended)** A method of measuring the amount of 25-hydroxy vitamin D and/or 1 $\alpha$ ,25-dihydroxy vitamin D in a sample using a competitive protein binding assay, comprising measuring displacement of a vitamin D derivative of formula (I) from a vitamin D binding protein by 25-hydroxy vitamin D or 1 $\alpha$ ,25-dihydroxy vitamin D, wherein a displacement efficiency of approximately 1 is obtained by using a vitamin D derivative of formula (I):



wherein:

R represents a 25-hydroxylated side-group of vitamin D<sub>2</sub> or of vitamin D<sub>3</sub>;

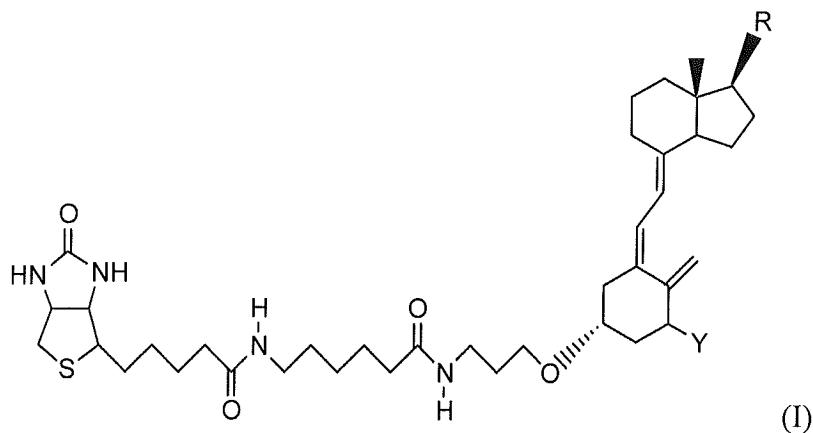
Y represents hydrogen or hydroxy;

and correlating the measurement of displacement of the vitamin D derivative of formula (I) from the vitamin D binding protein in the sample to the measurement of displacement of the vitamin D derivative of ~~formula~~ formula (I) from the vitamin D binding protein using a known quantity of the vitamin D derivative of formula (I) to determine the amount of 25-hydroxy vitamin D and 1 $\alpha$ ,25-dihydroxy vitamin D in the sample.

2. **(Canceled)**

3. **(Original)** The method of claim 1, wherein the method is sandwich immunoassay, selected from the group consisting of immuno radiometric assay, IEMA/EIA, immuno luminometric assay and immunofluorometric assay.

4. (Currently amended) A kit for detection of 25-hydroxy vitamin D or 1 $\alpha$ , 25-dihydroxy vitamin D or both in a sample ~~on~~byby a competitive protein binding assay, wherein displacement of a vitamin D derivative of the formula (I) from a vitamin D binding protein is measured and the vitamin D derivative displaces 25-hydroxy vitamin D or 1 $\alpha$ ,25-dihydroxy vitamin D from the vitamin D binding protein, comprising a standardized quantity of a solid vitamin D derivative of formula (I) or a standardized solution of a vitamin D derivative of formula (I):



wherein:

R represents a 25-hydroxylated side-group of vitamin D<sub>2</sub> or of vitamin D<sub>3</sub>;  
Y represents hydrogen or hydroxy.

5-6. (Cancelled)

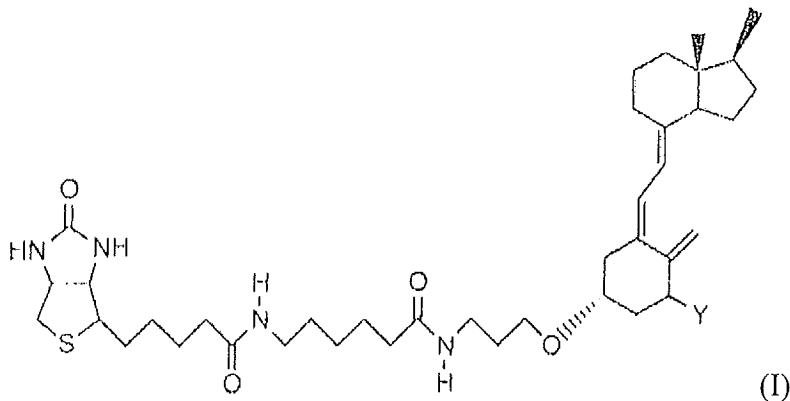
7. (Original) The kit of claim 4 comprising a solid phase selected from the group consisting of a microtitration plate, another solid carrier, a microparticle, a polymeric material, and a cellulose.

8. (Original) The kit of claim 7, in which the solid phase is a microparticle comprising agarose.

9. (Original) The kit of claim 7, in which the solid phase is a magnetic microparticle.

10. (Cancelled)

11. **(Previously Presented)** The method of claim 1, wherein said competitive protein binding assay is selected from the group consisting of an enzyme immunoassay, an enzyme-linked immunosorbent assay, a radio immunoassay, an immunoradiometric assay, a luminescence assay, a fluorescence immunoassay and an immunofluorometric assay.
12. **(Previously Presented)** The method of claim 1 wherein Y is hydroxy.
13. **(Previously Presented)** The kit of claim 4 wherein Y is hydroxy.
14. **(Currently amended)** The method of claim 1, wherein the amount of  $\text{1}\alpha,25$ -dihydroxy vitamin D is measured and 25-hydroxy vitamin D is removed from the sample before performing the competitive protein binding assay.
15. **(Currently amended)** The method of claim 1, in which an antibody that specifically binds  $\text{1}\alpha,25$ -dihydroxy vitamin D is used as the vitamin D binding protein in the competitive protein binding assay.
16. **(New)** A method of measuring the amount of  $\text{1}\alpha,25$ -dihydroxy vitamin D in human serum using a competitive protein binding assay, comprising:
  - i) separating 25-hydroxy vitamin D from the  $\text{1}\alpha,25$ -dihydroxy vitamin by binding  $\text{1}\alpha,25$ -hydroxy vitamin D in a sample of the human serum to a material that specifically binds  $\text{1}\alpha,25$ -hydroxy vitamin D and eluting  $\text{1}\alpha,25$ -dihydroxy vitamin D from said material to provide a measurement sample,
  - ii) measuring the displacement of a vitamin D derivative of formula (I) from an antibody that specifically binds  $\text{1}\alpha,25$ -dihydroxy vitamin D,  
wherein a displacement efficiency of approximately 1 is obtained by using a vitamin D derivative of formula



wherein:

R represents a 25-hydroxylated side-group of vitamin D<sub>2</sub> or of vitamin D<sub>3</sub>, and Y represents hydroxy; and

iii) correlating the measurement of displacement of the vitamin D derivative of formula (I) from said antibody to the measurement of displacement of the  $\text{1}\alpha,25$ -dihydroxy vitamin D from the antibody using a known quantity of the vitamin D derivative of formula (I) to determine the amount of  $\text{1}\alpha,25$ -dihydroxy vitamin D in the sample.

17. (New) The kit of claim 4, comprising an antibody that specifically binds  $\text{1}\alpha,25$ -dihydroxy vitamin D as a binding protein.

18. (New) The kit of claim 4, further comprising a column material that can bind  $\text{1}\alpha,25$ -dihydroxy vitamin D for separation of 25-hydroxy vitamin D from  $\text{1}\alpha,25$ -dihydroxy vitamin D.